# **Appendix D: Concurrence Letters for the Programmatic Biological Assessments**



# UNITED STATES DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration

NATIONAL MARINE FISHERIES SERVICE Northwest Region 7600 Sand Point Way N.E., Bldg. 1 Seattle, WA 98115

April 10, 2001

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Colonel Ralph H. Graves
District Engineer
Corps of Engineers, Seattle District
Post Office Box 37551
Seattle, Washington 98124-3755

Attention: Patrick T. Cagney

Re: Section 7 Informal Consultation on the U.S. Army Corps of Engineers' Green Duwamish Ecosystem Restoration Program, King County, Washington (NMFS No. WSB-00-423) and Essential Fish Habitat Consultation.

Dear Colonel Graves:

This correspondence is in response to your request for consultation under the Endangered Species Act (ESA). Additionally, this letter serves to meet the requirements for consultation under the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act).

# Endangered Species Act

The National Marine Fisheries Service (NMFS) has reviewed the August 31, 2000 request for concurrence with your findings of "may affect, not likely to adversely affect (NLAA)" for the above referenced program, based on the Programmatic Biological Assessment (PBA, June 2000), Final Feasibility Report (October 2000), and Supplemental Letter (March 27, 2001). Your findings in regard to the listing of Puget Sound chinook salmon (*Oncorhynchus tshawytscha*) as Threatened under the ESA. This consultation with the United States Army Corps of Engineers (ACOE) is conducted under section 7(a)(2) of the ESA, and its implementing regulations, 50 CFR Part 402.

The NMFS has evaluated the 50 projects in this ten-year program directed at ecosystem habitat restoration and enhancement, largely for salmonids and especially Chinook salmon, and concurs with your findings of "may affect, not likely to adversely affect," to either the species or the designated critical habitat for most of the projects (See Table 1). Based on the ACOE's Supplemental Letter of March 27, 2001 to the PBA, NMFS agrees with the assignment of the projects into four groups: early action (Calendar Year 2001), Phase 1 projects (Years 2002-2003), Phase 2 (Years 2004-2009), and those that require an individual consultation or reinitiation under this consultation, based on requiring more detailed construction plans. Five projects during Phase 1 are considered Demonstration Projects which will provide information on how to better implement larger scale projects planned for Phase 2 which ultimately occur at

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# multiple sites or units.

Table 1 Green Duwamish Ecosystem Restoration Program Projects

Project No	Project Name			Phase	ES	A Status	
Marine Projec	<u>ts</u>						
· I Elliott	Bay Nearshore		1		Concur		•
Tidally-Influe	nced Estuarine Projects						
	Duwamish		)		Concur		
•	on Side Channel				Concur		
4 Codiga		Early A	•				
+ Codiga	a raimş	Earty A	споп		Concur		, •
Free-Flowing	Riverine Projects				•		
5 Black	River Marsh		2		Concur		
6 Gilliar	n Creek		2		Concur		
7 Lower	Springbrook Creek		1		Concur		
8 Upper	Springbrook Creek		1		Concur		
	reek East	:	2.		Concur		•
.10	Garrison Creek			2		Concur	
11	Mullen Slough, Prentice Nur	sery Read	ch	2	C	Concur	
12	Mullen Slough Reach	·		2		Concur ·	
13	Mill Creek, Schuler Brothers	Reach		2	r	Concur	
14	Mill Creek, Merlino Reach			2	C	Concur	
15	Mill Creek, Wetland 5 K Rea	ach		2	C	Concur	
16	Mill Creek, Goedeke Reach			2	. 0	Concur	
17	Green River Park			1	. (	Concur	٠.
18	Horsehead Bend Side Chann	iel		1		Concur	
. 19	NE Auburn Creek			1		Concur	
. 20	Meridian Valley Creek	•		1	(	Concur	
21	Lake Meridian Outlet Reloca	ation		1	(	Concur	
22	Olson Creek	•		1		Concur	
23	Riverside Estates Side Chang	nel		2	. (	Concur	
24	Mainstem Maintenance			1	Concur :	for Demo	
25	Porter Levee	•		2	(	Concur	
26	Kaech Levee Pond			2	(	Concur	, <u>,</u>
27	Ray Creek Trib Corridor			2	(	Concur	
28.	Hamikami Levee Modificati	on .		2	(	Concur	•
29	Turley Levee Setback	•		2		Concur	
30	Loans Levee Setback			1		Concur	
31	Burns Creek Restoration	•		1 .		Concur	
32	Middle Green River Large V	Woody Do	ebris	1	Concur	for Demo	

	33 34 35 36 37 38 39 40	Middle Green River Gravel Replacer Flaming Geyser Landslide Flaming Geyser Side Channel Newaukum Creek Big Spring Creek Brunner Slough Upper Green R Side Channel Enhand Upper Green River Gravel Replacen	2 2 1 2 1 cement 2	Concur for Demo Individual <sup>2</sup> Concur Concur for Demo Concur Concur Individual Concur for Demo
<u>A</u> '	oove Howa	rd Hansen Dam	•	
	41	Gale Creek	1	Concur
	42	Boundary Creek	2	Concur <sup>3</sup>
	43	Sweeney Creek	Early Action	Concur
	44	Olsen Creek	2	Concur
	45	May Creek	2	Concur <sup>3</sup>
	46	Maywood Creek	2	Concur <sup>3</sup>
•	47	Gold Creek	2	Concur
	48	Sunday Creek Riparian Planting	1	Concur
	49	North East Creek	2 .	Concur <sup>3</sup>
	50	Volunteer Revegetation	1	Concur

1 Concurrence as NLAA for one demonstration unit in each project.

<sup>2</sup> Either reinitiate this consultation or initiate a new consultation, based on further Project designs.

<sup>3</sup> Culvert replacement projects will use NMFS' Guidelines for Salmonid Passage Stream Crossings, Final Draft, March 28, 2000 (Appended).

Those restoration projects in which NMFS concurs provide an increase in quantity of critical and essential fish habitat though the removal of upland fill and the removing of fish passage impediments and an increase in quality of the critical and essential fish habitat because of the reasons provided in your Biological Assessment and Supplemental Letter: 1) the work will be done during a time of the year when chinook salmon are not present; 2) most of the upland construction will take place "in the dry" with final connection to the aquatic environment during permissible periods, 3) the implementation employs a landscape ecological approach for the entire watershed from the headwaters of the Green River through the Duwamish estuary to marine habitats in Elliott Bay shallow subtidal substrates; 4) these projects will complement other ongoing Green-Duwamish River Basin restoration and mitigation efforts; and 5) the project will meet all of the Washington Department of Fish and Wildlife Hydraulic Project Approval conditions.

This concludes informal consultation on these actions in accordance with 50 CFR 402.14(b)(1). The ACOE must reinitiate this ESA consultation if: 1) new information reveals effects of the action that may affect listed species in a way not previously considered; 2) the action is modified

in a manner that causes an effect to the listed species that was not previously considered; or 3) a new species is listed, or critical habitat designated, that may be affected by the identified action.

### Essential Fish Habitat

Federal agencies are obligated, under Section 305 of the Magnuson-Stevens Fishery Conservation and Management Act (MSA) (16 USC 1855(b)) and its implementing regulations (50CFR600), to consult with NMFS regarding actions that are authorized, funded, or undertaken by that agency, that may adversely affect Essential Fish Habitat (EFH). The MSA (§3) defines EFH as "those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity." Furthermore, NMFS is required to provide the Federal agency with conservation recommendations which minimize the adverse effects of the project and conserve EFH. This consultation is based, in part, on information provided by the Federal agency and descriptions of EFH for Pacific coast groundfish, coastal pelagic species, and Pacific salmon contained in the Fishery Management Plans produced by the Pacific Fisheries Management Council.

The proposed actions and action areas are described in the Biological Assessment. The action area covers four different types of habitats: marine, tidally-influenced estuarine, and riverine. The marine habitats contain designated EFH for various life-history stages of 46 species of groundfish, 4 coastal pelagic species, and three species of Pacific salmon; the estuarine habitats contain designated EFH for various life-history stages of 17 species of groundfish, four coastal pelagic species, and three species of Pacific salmon; and the riverine habitats include designated EFH for various life-history stages of three species of Pacific salmon (Table 2). Information submitted by the ACOE in the Programmatic Biological Assessment is sufficient for NMFS to conclude that the proposed action may adversely impact EFH in the short term by:

- 1. Increased siltation during in-water construction operations; and
- 2. Release of previously unknown chemical contamination during construction.

EFH Conservation Recommendations: The conservation measures that the ACOE included as part of the proposed action are adequate to minimize the long-term adverse impacts from this project to designated EFH for the species in Table 2. It is NMFS' understanding that the ACOE intends to implement the proposed activity with these built-in conservation measures that minimize potential adverse effect to the maximum extent practicable. While NMFS is satisfied with the nineteen General Best Management Practices (BMPs, in Section 2.5) in the PBA, short-term impacts should be minimized with the following recommendations.

1. Where gravel/cobble material is to be used in gravel replacement projects, it will be sieved (screen) to remove fine-grained materials smaller than 1/4" in diameter (BMP #15). It is assumed projects will require some level of maintenance over time; this should not include in-water dredging of sediments.

 Construction activities will cease if chemical contamination found at any site exceeds the State of Washington sediment standards or Model Toxics Control Act, where applicable (BMP #16), until the contamination is either removed or the project abandoned.

Please note that the MSA (§305(b)(4)(B)) requires the Federal agency to provide a written response to NMFS' EFH conservation recommendations within 30 days of its receipt of this letter.

This concludes EFH consultation in accordance with the MSA and 50CFR600. The ACOE must reinitiate EFH consultation with NMFS if the proposed action is substantially revised in a manner that may adversely affect EFH, or if new information becomes available that affects the basis for NMFS' EFH conservation recommendations (50 CFR 600.920(k)).

This concludes ESA and EFH consultations. If you have questions regarding either of these consultations, please contact Robert Clark at 206-526-4338.

Sincerely,

Donna Darm

Acting Regional Administrator

Table 2. Species of fishes with designated EFH in the proposed action areas (M = Marine, E = Estuarine, R = Riverine).

75.1	redstripe rockfish (M)	Dover sole (M, E)
Groundfish	S. proriger	Microstomus pacificus
Species	rosethorn rockfish (M)	English sole (M)
spiny dogfish (M, E)	S. helvomaculatus	Parophrys veiulus
Squalus acanthias	rosy rockfish (M)	flathead sole (M, E)
big skate (M)	S. rosaceus	Hippoglossoides elassodon
Raja binoculata	rougheye rockfish (M)	petrale sole (M, E)
California skate (M, E)	S. aleudianus	Eopsetta jordani ·
Raja inornata	sharpchin rockfish (M)	rex sole (M)
longnose skate (M)	S. zacentrus	Glyptocephalus zachirus
Raja rhina	splitnose rockfish (M)	rock sole (M, E)
ratfish (M, E)	S. diploproa	Lepidopsetta bilineata
Hydrolagus colliei	S. diptoprou	sand sole (M, E)
Pacific cod (M, E)	striptail rockfish (M) S. saxicola	Psettichthys melanosticius
Gadus macrocephalus	S. saxicola	starry flounder (M)
hake (M, E)	tiger rockfish (M)	Platichthys stellatus
Merluccius productus	S. nigrocinctus	arrowtooth flounder (M, E)
black rockfish (M)	vermilion rockfish (M)	Atheresthes stomias
Sebastes melanops	S. miniatus	
bocaccio (M, E)	yelloweye rockfish (M)	·
S. paucispinis	S. ruberrimus	Coastal Pelagic
brown rockfish (M, E)	yellowtail rockfish (M)	Species
S. auriculatus	S. flavidus	anchovy (M, E)
canary rockfish (M)	shortspine thornyhead (M)	Engraulis mordax
S. pinniger	Sebastolobus alascanus	Pacific sardine (M, E)
China rockfish (M)	cabezon (M, E)	Sardinops sagax
S. nebulosus	Scorpaenichthys marmoratus	Pacific macketel (M, E)
copper rockfish (M, E)	lingcod (M, E)	Scomber japonicus
S. caurinus	Ophiodon elongatus	market squid (M, E)
darkblotch rockfish (M)	kelp greenling (M, E)	Loligo opalescens
S. crameri	Hexagrammos decagrammus	Pacific salmon
greenstriped rockfish (M)	sablefish (M, E)	Species
S. elongatus	Anoplopoma fimbria	chinook (M, E, R)
Pacific ocean perch (M)	Pacific sanddab (M, E)	Oncorhychus tshawytscha
S. alutus	Citharichthys sordidus	coho (M, E, R)
quillback rockfish (M, E)	butter sole (M, E)	O. kisutch
S. maliger	Isopsetta isolepis	
redbanded rockfish (M)	curlfin sole (M, E)	Priget Sound pink (M, E, R)
S, babcocki	Pleuronichthys decurrens	O. gorbuscha



# United States Department of the Interior

# FISH AND WILDLIFE SERVICE

Western Washington Office 510 Desmond Drive SE, Suite 102 Lacey, Washington 98503 Phone: (360) 753-9440 Fax: (360) 753-9008

MAR 2 7 2001

Colonel Ralph H. Graves District Engineer Seattle District, Corps of Engineers P.O. Box 3755 Seattle, Washington 98124-3755

Attention: Mr. Pat Cagney

(FWS Reference: 1-3-01-I-0906)

Dear Colonel Graves:

This letter responds to your August 31, 2000 transmittal letter and Programmatic Biological Assessment (PBA) for the Green/Duwamish Ecosystem Restoration Program which we received on September 5, 2000. We are able to provide partial concurrence.

The PBA covers forty-nine restoration projects within the Green/Duwamish River Basin that the Corps of Engineers (Corps) is proposing for implementation over a ten year period. Fish and Wildlife Service (Service) and Corps staff have discussed on a number of occasions the need for more detailed project information to complete the Section 7 consultation. The Service proposed that the Corps meet annually with the Service, prior to the construction season, to review any refinements in project details that could have an impact on federally listed species, but especially the Coastal/Puget Sound bull trout. The Corps informed us in January 2001, that they were uncomfortable with the requirement for future reviews because of the uncertainties that could potentially affect project implementation. Instead, the Corps requested that the Service treat the PBA as a batch consultation. You further asked that we separate out any of the projects that we considered to be lacking in sufficient detail to complete the consultation, as well as projects for which we could not concur with the Corps' effect determination. For the purposes of this consultation, we are treating the forty-nine projects described in the PBA as a batch consultation.

The Corps of Engineers has determined that the actions, as described in its PBA, are not likely to adversely affect the bald eagle (Haliaeetus leucocephalus), marbled murrelet (Brachyramphus marmoratus), northern spotted owl (Strix occidentalis caurina), gray wolf (Canis lupus), Canada lynx (Lynx canadensis) and Coastal/Puget Sound bull trout (Salvelinus confluentus).

Based on the information provided in the PBA and the Corps' final feasibility report for the Green/Duwamish River Basin ecosystem restoration study, we concur with the Corps' determination of effects for the bald eagle, marbled murrelet, northern spotted owl, gray wolf, and Canada lynx. With regard to the Coastal/Puget Sound bull trout, we concur with the Corps' effect determination for forty-three of the forty-nine projects described in the PBA and listed in the attachment to this letter. These projects are covered under this consultation for a period of ten years.

USACE REGULATORY BRANCH We do not concur with the Corps' "not likely to adversely effect" determination for the bull trout for the following six projects: (1) mainstem maintenance (Auburn to Elliott Bay); (2) middle Green River large woody debris placement; (3) middle Green River gravel replacement; (4) Flaming Geyser landslide control; (5) Newaukum Creek restoration; and (6) upper Green River gravel replacement. We recommend that the Corps consult individually on these projects.

Although these six projects are expected to benefit bull trout in the long term, we believe they have the potential to adversely affect bull trout in the short term. These projects are larger and more complex than the others, involve significant in-water work, and have not been developed in enough detail at this time for us to conclude that the adverse impacts to bull trout would be insignificant. As project details become more refined, our concern for these projects and their potential impact to bull trout may lessen. In the absence of detailed project information, we need to be more cautious and therefore conclude that bull trout foraging could be adversely affected in the short term as a result of fine sediment releases during the modification of streambanks, the construction of engineered log jams, the addition of spawning gravels and the construction of other habitat improvements. Elevated levels of sediment can reduce the abundance of bull trout prey resources as well as make it more difficult for bull trout to locate their prey.

This concludes informal consultation pursuant to 50 CFR 402.13. This project should be reanalyzed if new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not considered in this consultation; if the action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in this consultation; and/or, if a new species is listed or critical habitat is designated that may be affected by this project.

If you have further questions about this letter or your responsibilities under the Act, please contact Gwill Ging at (360) 753-6041 or John Grettenberger at (360) 753-6044.

Sincerely

Carol Schuler, Manager Western Washington Office

Attachment A. The U.S. Fish and Wildlife Service concurs with Corps of Engineers' not likely to adversely affect determination for the following projects:

# Lower Green/Duwamish River Sites

Elliott Bay Nearshore Site 1, Duwamish Riverton Side Channel Codiga Farms

# Middle Basin Restoration Sites

Black River Marsh Gilliam Creek Lower Springbrook Creek Upper Springbrook Creek Mill Creek East Garrison Creek. Mullen Slough, Prentice Nursery Reach Mullen Slough Reach Mill Creek, Schuler Brothers Reach Mill Creek, Merlino Reach. Mill Creek, Wetland 5K Reach. Mill Creek, Goedeke Reach Green River Park Horsehead Bend Side Channel. NE Auburn Creek Meridian Valley Creek Lake Meridian Outlet Relocation Olson Creek Riverside Estates Side Channel Porter Levee Setback Kaech Levee Pond Ray Creek Trib Corridor Hamikami Levee Modification Turley Levee Setback Loans Levee Setback Burns Creek Restoration Flaming Geysers Side Channel Big Spring Creek Brunner Slough

Upper Green River Side Channel Enhancement

# Upper Basin Restoration Sites:

Gale Creek
Boundary Creek
Sweeney Creek
Olson Creek
May Creek
Maywood Creek
Gold Creek
Sunday Creek Riparian Planting
North East Creek